IN THE CLAIMS:

1-13 **(Canceled).**

14. **(Withdrawn)** The method of claim 1, further comprising:

monitoring inventory levels at a replenishment service center by said at least one supplier based upon said formal commitment;

refilling inventory items at said replenishment service center according to said formal commitment;

facilitating delivery of said inventory items to a site location for said enterprise by transmitting a pull signal to said replenishment service center; and

receiving said inventory items in response to said pull signal.

15. **(Withdrawn)** The method of claim 14, wherein said monitoring said inventory levels at said replenishment service center includes providing said site location for said enterprise, said at least one supplier, and said replenishment service center a visibility of said inventory materials in transit.

16. **(Withdrawn)** The method of claim 14, wherein said monitoring said inventory levels by said at least one supplier includes maintaining a minimum supply level.

17. **(Withdrawn)** The method of claim 16, wherein said minimum supply level is measured in days of supply at said replenishment service center.

18. **(Withdrawn)** The method of claim 17, wherein said days of supply is calculated by rationalizing current units of inventory against expected consumption.

19. **(Withdrawn)** The method of claim 18, wherein said expected consumption represents said constrained forecast.

20. **(Withdrawn)** The method of claim 14, wherein said monitoring said inventory levels is performed by accessing an inventory status provided by said replenishment service center.

21. **(Withdrawn)** The method of claim 14, wherein said site location for said enterprise monitors said inventory levels.

22. **(Withdrawn)** The method of claim 14, wherein said refilling said inventory items includes:

providing an advance ship notice to said replenishment service center and said site location for said enterprise; and

updating a database to indicate when said inventory items are shipped.

23. **(Withdrawn)** The method of claim 14, wherein said transmitting said pull signal to said replenishment service center includes providing a pull request number to said replenishment service center requesting delivery of said inventory items, wherein a transfer order is generated at said replenishment service center in response to said pull signal.

24. **(Withdrawn)** The method of claim 23, wherein a goods issued document is created in response to preparing said inventory items for delivery, said goods issued document including said pull request number.

25. **(Withdrawn)** The method of claim 24, wherein a goods receipt is generated upon delivery of said inventory items, said goods receipt associated with said pull request number.

26-38. **(Canceled)**

39. **(Withdrawn)** The storage medium of claim 26, further comprising instructions for causing a computer to implement:

monitoring inventory levels at a replenishment service center by said at least one supplier based upon said formal commitment;

refilling inventory items at said replenishment service center according to said formal commitment;

facilitating delivery of said inventory items to a site location for said enterprise by transmitting a pull signal to said replenishment service center; and

receiving said inventory items in response to said pull signal.

40. **(Withdrawn)** The storage medium of claim 39, wherein said monitoring said inventory levels at said replenishment service center includes providing said site location for said enterprise, said at least one supplier, and said replenishment service center a visibility of said inventory materials in transit.

41. **(Withdrawn)** The storage medium of claim 39, wherein said monitoring said inventory levels by said at least one supplier includes maintaining a minimum supply level.

42. **(Withdrawn)** The storage medium of claim 41, wherein said minimum supply level is measured in days of supply at said replenishment service center.

43. **(Withdrawn)** The storage medium of claim 42, wherein said days of supply is calculated by rationalizing current units of inventory against expected consumption.

44. **(Withdrawn)** The storage medium of claim 43, wherein said expected consumption represents said constrained forecast.

45. **(Withdrawn)** The storage medium of claim 39, wherein said monitoring said inventory levels is performed by accessing an inventory status provided by said replenishment service center.

46. **(Withdrawn)** The storage medium of claim 39, wherein said site location for said enterprise monitors said inventory levels.

47. **(Withdrawn)** The storage medium of claim 39, wherein said refilling said inventory items includes:

providing an advance ship notice to said replenishment service center and said site location for said enterprise; and

updating a database to indicate when said inventory items are shipped.

48. **(Withdrawn)** The storage medium of claim 39, wherein said transmitting said pull signal to said replenishment service center includes providing a pull request number to said replenishment service center requesting delivery of said inventory items, wherein a transfer order is generated at said replenishment service center in response to said pull signal.

49. **(Withdrawn)** The storage medium of claim 48, wherein a goods issued document is created in response to preparing said inventory items for delivery, said goods issued document including said pull request number.

50. **(Withdrawn)** The storage medium of claim 49, wherein a goods receipt is generated upon delivery of said inventory items, said goods receipt associated with said pull request number.

51. **(Previously Presented)** A method as recited in claim 54 further comprising:
receiving, from said at least one supplier, a formal commitment to produce a needed supply indicated in said constrained forecast.

52. **(Previously Presented)** A method as recited in claim 54 further comprising:

receiving, from said at least one supplier, a communication when said at least one supplier is unable to produce a needed supply indicated in said constrained forecast.

53. **(Currently Amended)** A method of using an MRP system to facilitate supply chain collaboration comprising:

running an MRP system to generate an unconstrained forecast; and

running the MRP system to generate a constrained forecast, said constrained forecast taking into account at least one supplier capability statement, a formal commitment from at least one supplier and said at least one supplier capability statement based on a supplier receiving said unconstrained forecast,

wherein the constrained forecast is at least one of equal or less than the unconstrained forecast, and wherein the constrained forecast further includes a most limiting resource constraint.

54. **(Currently Amended)** A method for facilitating supply chain collaboration over a network, the supply chain including an enterprise, enterprise sites, and at least one supplier, the method comprising:

aggregating demand received, at a central server of the enterprise, from a plurality of enterprise sites associated with the enterprise, the demand comprising materials requirements; wherein each of the plurality of enterprise sites comprises divisions that share common material requirements with divisions from others of the plurality of enterprise sites, the common material requirements for each of the divisions corresponding with a product or commodity, wherein the material requirements include a plurality of resource constraints including a most limiting resource constraint;

generating an unconstrained forecast resulting from the aggregating, the unconstrained forecast generated at a product or commodity level;

transmitting the unconstrained forecast over the network to each of the suppliers that service the enterprise sites for which the unconstrained forecast is generated;

receiving supplier capability statements over the network, the supplier capability statements received by the division at each of the enterprise sites from corresponding suppliers in response to the transmitting;

generating a constrained forecast, wherein the constrained forecast is at least one of equal or less than the unconstrained forecast, and wherein the constrained forecast further includes the most limiting resource constraint;

identifying a sub-group of suppliers who provide a formal commitment, wherein the sub-group of suppliers is at least one of equal to or less than the suppliers that service the enterprise sites;

receiving a formal commitment from the sub-group of the suppliers; and

transmitting the constrained forecasts to the sub-group of the suppliers at an enterprise site level over the network.

55. **(Previously Presented)** The method of claim 54, wherein the unconstrained forecast is generated via a centralized material resource planning engine at the enterprise.

56. **(Previously Presented)** The method of claim 54, wherein generating the unconstrained forecast includes exploding the aggregated demand into time-bucketed materials requirements at the product or commodity level.

57. **(Previously Presented)** The method of claim 54, wherein the unconstrained forecast is transmitted to each of the suppliers via the world wide web.

58. **(Previously Presented)** The method of claim 54, wherein the supplier capability statements include a greatest amount of materials each of the suppliers is able to make available to the division .

59. **(Previously Presented)** The method of claim 54, wherein the generating a constrained forecast includes:

inputting the supplier capability statements into a centralized constraint-based optimization tool at the central server, the centralized constraint-based optimization tool performing squared set analysis and applying capacity constraints;

producing a squared set build plan from results of the squared set analysis; and

inputting the squared set build plan into a materials resource planning tool for processing, the results of the processing used in generating the constrained forecast.

60. **(Previously Presented)** The method of claim 59, wherein squared sets resulting from the squared set analysis include an exploded demand including optimized volumes.

61. **(Previously Presented)** The method of claim 59, wherein the performing squared set analysis further comprises imploding component data, tracing the component data through a manufacturing cycle up to a final product while factoring in at least one of constraints and business rules.

62. **(Currently Amended)** A storage medium encoded with machine-readable computer program code for facilitating supply chain collaboration over a network, the supply chain including an enterprise, enterprise sites, and at least one supplier, the storage medium including instructions for causing a computer to implement a method comprising:

aggregating demand received, at a central server of the enterprise, from a plurality of enterprise sites associated with the enterprise, the demand comprising materials requirements; wherein each of the plurality of enterprise sites comprises divisions that share common material requirements with divisions from others of the plurality of enterprise sites, the common material requirements for each of the divisions corresponding with a product or commodity, wherein the material requirements include a plurality of resource constraints including a most limiting resource constraint;

generating an unconstrained forecast resulting from the aggregating, the unconstrained forecast generated at a product or commodity level;

transmitting the unconstrained forecast over the network to each of the suppliers that service the enterprise sites for which the unconstrained forecast is generated;

receiving supplier capability statements over the network, the supplier capability statements received by the division at each of the enterprise sites from corresponding suppliers in response to the transmitting;

generating a constrained forecast, wherein the constrained forecast is at least one of equal or less than the unconstrained forecast, and wherein the constrained forecast further includes the most limiting resource constraint;

identifying a sub-group of suppliers who provide a formal commitment, wherein the sub-group of suppliers is at least one of equal to or less than the suppliers that service the enterprise sites;

receiving a formal commitment from the sub-group of the suppliers; and

transmitting the constrained forecasts to the sub-group of the suppliers at an enterprise site level over the network.

63. **(Previously Presented)** The storage medium of claim 62, wherein the unconstrained forecast is generated via a centralized material resource planning engine at the enterprise.

64. **(Previously Presented)** The storage medium of claim 62, wherein generating the unconstrained forecast includes exploding the aggregated demand into time-bucketed materials requirements at the product or commodity level.

65. **(Previously Presented)** The storage medium of claim 62, wherein the unconstrained forecast is transmitted to each of the suppliers via the world wide web.

66. **(Previously Presented)** The storage medium of claim 62, wherein the supplier capability statements include a greatest amount of materials each of the suppliers is able to make available to the division.

67. **(Previously Presented)** The storage medium of claim 62, wherein the generating a constrained forecast includes:

inputting the supplier capability statements into a centralized constraint-based optimization tool at the server, the centralized constraint-based optimization tool performing squared set analysis and applying capacity constraints;

producing a squared set build plan from results of the squared set analysis; and

inputting the squared set build plan into a materials resource planning tool for processing, the results of the processing used in generating the constrained forecast.

68. **(Previously Presented)** The storage medium of claim 67, wherein squared sets resulting from the squared set analysis include an exploded demand including optimized volumes.

69. **(Previously Presented)** The storage medium of claim 67, wherein the performing squared set analysis further comprises imploding component data, tracing the component data through a manufacturing cycle up to a final product while factoring in at least one of constraints and business rules.